that a physician, if unable to heal or cure, shall do no harm. To some physicians, this means that they must do everything possible to ensure the physical well-being of their patients, or more problematic, everything that might help their patient. Many patients and policymakers have the same expectations. In economic terms, this means that we are required by medical ethics to devote such resources to the care of our patients that the marginal effect of the last dollar spent approaches zero. If we follow this injunction rigorously, we can easily spend our entire gross national product on health care many times over. Thus the shift of managed care or managed-cost. The new ethic of health care says "Perform procedures until the marginal health benefit is greater than or equal to the marginal monetary cost." This new ethic results in less medical care, but it ensures that whatever we get for the expenditure of the health-care dollar is worth the cost of providing the care. Physicians and healthcare administrators for most of the post-World War II period were encouraged to believe that money should never be a consideration in the medical decisionmaking process. Today, we are being told that money should always be considered. Moreover, the decisionmakers in healthcare financing gravitate towards a cost-benefit standard - a collectivist standard not always in the best interest of individual patients.

It is for this reason that organized medicine must continue to represent the patients in this social equation. This can only be done when organized medicine has the financial and staff assets to be part of the bureaucratic decisionmaking process. If organized medicine is unable to continue to function in our society, the practice of medicine will truly become a service industry rather than a profession, something that many social planners are strongly advocating at the present time. It is only by flexing the muscle that comes through unity that we will ensure our ability to practice our profession. This requires that every physician who wishes to continue to practice as a professional do their part to support organized medicine. If we do not do so, the medical profession as we know it will disappear and we will have only ourselves to blame. The choice is ours. I pray we make the right one.

Medical School Hotline

An Update on the USMLE Performance of Medical Students at the John A. Burns School of Medicine and Computer-Based Testing

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As reported in this annual update on the United States Medical Licensing Exam (USMLE), the students at the John A. Burns School of Medicine (JABSOM), continue to do well, especially on the Step 1 exam. Also, at its June 1998 meeting, the Composite Committee, which consists of members representing the Federation of State Medical Boards, the National Board of Medical Examiner and Educational Commission for Foreign Medical Graduates, formally voted to implement Computer-Based Testing (CBT) beginning in 1999.

Students in the JABSOM Class of 2000, who challenged the Step 1 exam this past June, achieved a post-Problem-Based Learning curriculum high passing rate of 98%, compared to the national passing rate of 95%. The mean score for JABSOM students was identical to the national mean of 216. The passing rate for our current seniors on the Step 2 exam, taken in August 1997, was 96%, as compared to the national rate of 95%; however, the mean score for JABSOM students was 214, slightly higher than the national mean of 209. As before, although the National Board of Medical Examiners steadfastly states that it is a licensing exam and should not be used as a method of evaluation of curricula, the faculty continues to feel that the students' performance is an indication that they have mastered the skill of learning, or at least solved the problem of how to pass the USMLE.

As a brief review, the USMLE is the only path to licensure in the U.S. and its territories, and a passing score in all three steps is one of the requirements. Step 1 is designed to assess a student's ability to apply knowledge and understand key concepts of basic biomedical science, with an emphasis on principles and mechanisms of health, disease, and modes of therapy. The Step 2 exam is to determine whether a student can apply basic science knowledge and understand the clinical science necessary to care for patients under supervision, and now includes health promotion and disease promotion. Step 3, usually taken near or after completion of one postgraduate year of clinical training, assesses the ability to apply the medical knowledge and understanding of biomedical and clinical science considered essential for the unsupervised practice of medicine with emphasis on patient management in ambulatory setting.[1]

While the purpose and fundamental content of the USMLE will not be affected significantly by the conversion to the computer-based format, the effect of the Composite Committee's

decision to proceed with the conversion in 1999 means that the standard large-group paper-and-pencil exam will no longer be offered. Instead, beginning in April 1999 for Step 1, July/ August 1999 for Step 2, and October 1999 for Step 3, eligible candidates will be able to self-schedule their exams at any time at one of over 1,500 Sylvan Prometric Test Centers around the world, or at an approved Medical School Center. Consequently, it is anticipated that the last administrations of the paper-and-pencil exams will be October 1998, March 1999, and May 1999 for Steps 1, 2, and 3, respectively.

As previously noted in our 1997 update, the major rationale for the switch to CBT was concerns regarding exam security and the advantages of the format for enhancing assessment methods and flexibility in scheduling. The physical security of the exam will be controlled through computerized, electronic transmission of encrypted data, and the proctoring of examinees will be aided by use of audio and video monitors. Also, hundreds of content-parallel test forms created from very large banks of test questions will be used on different days, in different locations, and even on the same day in the same center.[2]

New assessment methods will include clinical and laboratory simulations and multimedia presentations of sounds and images, as well as adaptive testing, which involves altering the difficulty of subsequent blocks in response to an individual's proficiency to improve the precision of the final score. However, while the blocks may vary in average difficulty, they will meet the same content specifications and, therefore, every examinee will be tested on equivalent content.

Implications of the scheduling flexibility for students have many medical schools struggling to anticipate and respond to it's impact on curricula and scheduling. For example, schools which require students to take or pass Step 1 in order to progress to the third year will be faced with the logistical problem of insuring that sufficient resources exist to examine all students in what is anticipated to be a short period of time, or whether to grant delayed start dates to those who choose not to or are unable to take the exam prior to the scheduled start date. However, the shortened score report date, which will eventually be two weeks as compared to the current seven weeks, will be a distinct advantage in initiating appropriate remediation.

In response to the concern regarding having a sufficient number of computer stations for our students, and the belief that this format will become a significant part of the future assessment methodology, JABSOM has submitted a request to the National Boards to become an exam site by May 1999. Hawaii currently has only one Sylvan Technology Center (in Kailua), which plans to expand from it's current four stations to eight by April 1999, but also administers licensing exams for a number of other specialists, including paramedics, nurses, medical technologists, and air traffic controllers. Given the structure of our current curriculum it is anticipated that the majority of our students would prefer to take the Step 1 exam after the end of their second year and before the start of their third year, a span of approximately three weeks. The exam, which is seven hours long with a total of one hour of break time, would require exclusive use of the Sylvan Center's eight stations for nearly 10 days, given additional time for those needing special accommodations, etc. for our students alone; a situation Sylvan will not guarantee. The proposal for JABSOM to become a Medical School Center represents a significant investment in terms of space and resources, but reflects our commitment to our students and remaining at the forefront of advances in medical education.

In summary, JABSOM students, under the Problem-Based Curriculum, have continued to improve on their ability to pass the USMLE, especially on the Step 1 exam. It is anticipated that, given there will be no change in the exam content and the students will receive support from the medical school in the form of our own test center, conversion to the computer-based testing format should not have any significant impact on their future performance.

References

1. Bulletin of Information, United States Medical Licensing Examination,™ 1998.
2. Plans for Administering the Medical Licensing Examination on Computer, Special Bulletin on Computer-Based Testing for the United States Medical Licensing Examination,™ 1998.